

REMARKS

Applicants respectfully request reconsideration of this Patent Application, particularly in view of the above Amendment and the following remarks. No additional fee is required for this Amendment as the number of independent claims is less than three, and the total number of claims is equal to twenty.

Request for Telephone Interview

Applicants kindly request the Examiner to contact the undersigned at (847) 490-1400 to schedule a telephone interview, to discuss the merits of this Patent Application.

Amendment to the Claims

Applicants have amended Claim 1 to recite that the central air conditioning arrangement feeds a cold air to the double bottom, a part of cold air is fed from the double bottom into the interior of the heat exchange cabinet, and the remaining cold air is conducted further in the double bottom. Support for this amendment can be found, for example, in the Substitute Specification on page 7, lines 7-10, and in FIGS. 1 & 2.

Applicants have amended Claims 3, 7, 10, 15 and 18 for clarity and Claim 10 to correct the dependency.

Applicants have also included new Claim 20. Claim 20 finds support in original Claim 1 with the additional limitation that the double bottom is also connected to the switchgear cabinet to supply cold air directly to the heat generating built-in devices in the switchgear cabinet. Support for this limitation can be found, for example, in the Substitute Specification on page 5, the last paragraph, and on page 7, the last sentence.

No new matter has been added to the claims by this Amendment.

Claim Rejections - 35 U.S.C. §103

The rejection of Claims 1-19 under 35 U.S.C. §103(a) as being unpatentable over Bilski et al., U.S. Patent 6,351,381, is respectfully traversed.

Amended Claim 1 recites cold air (35) provided by a central air conditioning arrangement, where part of cold air (36) is provided to interior (11) of heat exchange cabinet (10) through double bottom (30), and remaining cold air (37) is conducted further in double bottom (30). This amendment is intended to clarify that a central air conditioning arrangement is separated from the heat exchange cabinet.

This arrangement allows a single central air conditioning unit to supply cool air to multiple cabinets.

Applicants assert that the Bilski Patent does not teach or suggest a system that includes a central air conditioning unit that supplies air to a double bottom which allows part of the cool air to pass into a heat exchange cabinet and a remaining part of the cool air to conduct further down the double bottom. The air conditioning unit of the Bilski Patent, shown in FIG. 7, is not a central air conditioning unit and it is not remote to the heat exchange cabinet but is instead positioned within cabinet 15. Further, the Bilski Patent does not include a double bottom connected to the air conditioning unit.

The Bilski Patent does not provide or suggest all limitations of Claim 1, the rejection should be withdrawn.

New Claim 20 recites a system that cools the components in the switchgear cabinet by both a fluid heat exchange and by providing cold air directly to the switchgear cabinet from the air conditioning system.

Applicants assert that the Bilski Patent does not teach or suggest a system that cools components in a switchgear cabinet by the combination of a coolant-based heat exchanger and a central air conditioning arrangement. The Bilski Patent teaches a system that cools half of a switchgear cabinet's components by a fluid heat

exchange and the other half the switchgear cabinet's components by an air-to-air heat exchange. None of the components of the Bilski Patent are cooled by both a coolant-based heat exchange and an air heat exchange.

Regarding new Claim 20, in the Bilski Patent, electronic modules 20 are stored in bottom portion 28 and are cooled by cold plate 103. Cold plate 103 is a cooling system including a thermally conductive material with channels in which coolant fluid 127 passes through to draw away heat generated by electronic modules 20. Bottom portion 18 is sealed and is only cooled by cold plates 103 because of concerns of contaminates, such as dust and water, damaging electronic modules 20. Therefore, one of skill in the art would not have found it obvious to ignore the isolation aspect and to further include an air inlet to allow air to pass over components to further cool the electronic modules 20. To do so would be contrary to the concern of contaminants damaging electronic components.

In view of the above comments, Applicants respectfully assert that the claimed invention is patentable over the Bilski Patent. Favorable reconsideration and withdrawal of this rejection are respectfully requested.

Serial No.: 10/559,947

Conclusion

Applicants intend to be fully responsive to the outstanding Office Action. If the Examiner detects any issue which the Examiner believes Applicants have not addressed or resolved in this response, Applicants' undersigned attorney requests a telephone interview with the Examiner.

Applicants sincerely believe that this Patent Application is now in condition for allowance and, thus, respectfully requests early allowance.

Respectfully submitted,



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